## **Claims**

What is claimed is:

A system adapted to size a user interface (UI) element having at least one component in response to a sizing input comprising:

a sizing module adapted to size a first component in response to the sizing input; and an alignment module adapted to align a second component within the sized first component.

- 2. The system of claim 1 wherein the UI element is themed.
- 3. The system of claim 1, wherein the first component is a bitmap and the sizing module is adapted to divide the bitmap into a plurality of grids and adjust margins of at least some of the grids to size at least some of grids of the bitmap.
- 4. A method for sizing a \( \psi \)I element having at least one component in response to a sizing input comprising:

receiving the sizing input;

dividing a bitmapped first component into a plurality of grids;

adjusting the margins of at least some of the grids to size at least some of the grids of the bitmap in response to the sizing input; and

aligning a second component within the sized first component.

- 5. The method of claim 4 wherein the UI element is themed.
- 6. A computer-readable medium storing computer-executable instructions adapted to perform the method of claim 4.

7. In a computer system having a graphical user interface including a context that a UI element can be rendered to, a method for rendering a UI element having at least one component that is sized in response to sizing input comprising:

receiving the sizing input;

dividing a bitmapped first component into a plurality of grids;

adjusting margins of at least some of the grids to size at least some of the grids of the bitmap in response to the sizing input;

aligning a second component within the sized first component; and rendering the UI element to the context.

- 8. The method of claim 7 wherein the UI element is themed.
- 9. A system adapted to size a bitmapped component of a UI element in response to a sizing input, where the bitmapped component was designed under a particular DPI, the system comprising:

a sizing module adapted to size the bitmapped component in response to the sizing input and based upon a functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the bitmapped component was designed under.

- 10. The system of claim 9 wherein the UI element is themed.
- 11. The system of claim 9, wherein the sizing module is adapted to divide the bitmapped component into a plurality of grids and adjust the size of the grids to size the component.
- 12. The system of claim 1 wherein the sizing module is adapted to adjust margins of the grids to adjust the size of the grids.
- 13. The system of claim 12 wherein the sizing module is adapted to adjust the margins of the grids based upon the functional relationship between the DPI of the context that the UI



element is being rendered to and the DPI that the bitmapped component was designed under.

- 14. The system of claim 11, wherein the sizing module is adapted to adjust the margins of the grids such that the size of each of the grids is adjusted in both the horizontal and vertical directions.
- 15. The system of claim 14, wherein the functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the bitmapped component was designed under is the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the bitmapped component was designed under.
- 16. A method for sizing a bit happed component of a UI element in response to sizing input, where the bitmapped component was designed under a particular DPI, the method comprising:

receiving the sizing input; and

sizing the bitmapped component in response to sizing input and based upon a functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the bitmapped component was designed under.

- 17. The method of claim 16 wherein the UI element is themed.
- 18. The method of claim 16 further including:
  dividing the bitmap into a plurality of grids; and
  adjusting margins of the grids to adjust the size of the grids based upon the functional

relationship between the DPI of the context that the UI element is being rendered to and the DPI that the bitmapped component was designed under.

19. The method of claim 18 further including:
adjusting the margins of the grids such that the size of each of the grids is adjusted in



both the vertical and horizontal directions.

20. The method of claim 19 further including:

adjusting the margins of the grids based upon the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the bitmapped component was designed under.

- 21. A computer-readable medium storing computer-executable instructions adapted to perform the method of claim 20.
- 22. In a computer system having a graphical user interface including a context that a UI element having a bitmap component can be rendered to, a method for rendering the UI element in response to sizing input where the bitmapped component was designed under a particular DPI, the method comprising:

receiving the sizing input; and

sizing the bitmapped component in response to the sizing input and based upon a functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the bitmapped component was designed under.

- 23. The system of claim 22 wherein the UI element is themed.
- 24. The method of claim 22 further including:

dividing the bitmap into a plurality of grids; and

adjusting margins of the grids to adjust the size of the grids based upon the functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the bitmapped component was designed under.

25. The method of claim 24 further including:

adjusting the margins of the grids such that the size of each of the grids is adjusted in



both the vertical and horizontal directions.

26. The method of claim 25 further including:

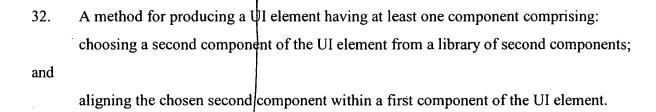
adjusting the margins of the grids based upon the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the bitmapped component was designed under.

27. A system adapted to produce a UI element having at least one component comprising: a sizing module adapted to choose a second component of the UI element from a library of second components; and

an alignment module adapted to align the chosen second component within a first component of the UI element.

- 28. The system of claim 27 wherein the UI element is themed.
- 29. The system of claim 27 wherein entries within the library are designed under a particular DPI, the sizing module adapted to choose the second component from the library based upon a functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the entries within the library were designed under.
- 30. The system of claim 29 wherein the sizing module is adapted to choose the second component from the library based upon the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the entries within the library were designed under.
- 31. The system of claim 30 wherein the sizing module is further adapted to refine the size of the chosen second component based upon the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the entries within the library were designed under.





33. The method of claim 32, wherein entries within the library are designed under a particular DPI, the method further including:

choosing the second component from the library based upon a functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the entries within the library were designed under.

34. The method of claim 33 further comprising:

choosing the second component from the library based upon the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the entries within the library were designed under.

35. The method of claim 34 further comprising:

refining the size of the chosen second component based upon the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the entries within the library were designed under.

- 36. A computer-readable medium having computer-executable instructions adapted to perform the method of claim 32.
- 37. A computer-readable medium having computer-executable instructions adapted to perform the method of claim 33.
- 38. In a computer system having a graphical user interface including a context that a UI element having at least one component can be rendered to, a method for rendering a UI

35





element comprising:

choosing a second component of the UI element from a library of second components; aligning the chosen second component within a first component of the UI element; and rendering the UI element to the context.

- 39. The system of claim 38 wherein the UI element is themed.
- 40. The method of claim 38, wherein entries within the library are designed under a particular DPI, the method further including:

choosing the second component from the library based upon a functional relationship between the DPI of the context that the UI element is being rendered to and the DPI that the entries within the library were designed under.

41. The method of claim 40 further including:

choosing the second component from the library based upon the ratio of the DPI of the context that the UI element is being rendered to to the DPI that the entries within the library were designed under.

42. A system adapted to produce a UI element having at least one component in response to sizing input comprising:

a sizing module adapted to size a scalable font of a second component in response to the sizing input and based upon the DPI of a context that the UI element is being rendered to; and

an alignment module adapted to align the sized second component within a first component of the UI element.

43. The system of claim 42 wherein the UI element is themed.

44. A system adapted to produce a UI element having at least one component in response to sizing input comprising:

a sizing module adapted to size a vector of a second component of the UI element in response to the sizing input and based upon the DPI of acontext that the UI element is being rendered to; and

an alignment module adapted to align the sized second component within a first component of the UI element.

45. The system of claim 44 wherein the UI element is themed.

